The Mule Deer Initiative Action Plan

A Roadmap for Success

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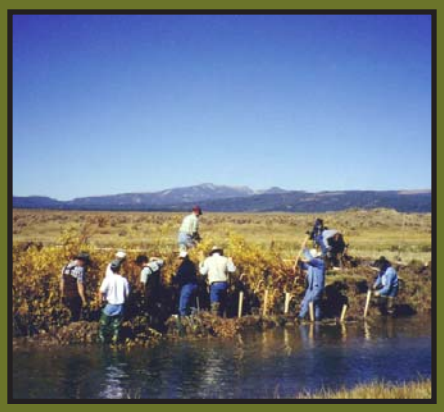
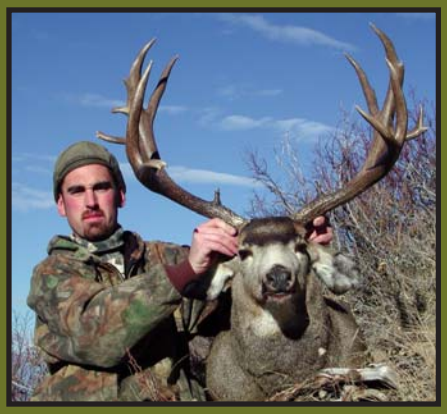




Mule Deer Initiative

Mule Deer for the Future

October 10, 2005

IDAHO FISH & GAME

Table of Contents

Introduction

The Mule Deer Initiative Action Plan outlines actions to accomplish the goals of the Mule Deer Initiative (MDI). The scope of activities and projects will be determined by funding and public preference and acceptance.

What is the Mule Deer Initiative?

A focused and increased effort by the Idaho Department of Fish and Game (IDFG) to:

- **Improve mule deer numbers**
- **Increase hunter satisfaction**
- **Protect and improve habitat**

Mule deer are an important wildlife resource to Idaho's hunters and citizens. Southern and eastern Idaho have traditionally been renowned for abundant mule deer populations providing ample opportunity for hunting and harvest of mature bucks. From 1984 to 1992 high productivity and strong winter survival resulted in high mule deer numbers. Since then, the trend in mule deer populations in portions of Idaho, has been downward. The combined effects of a dry summer in 1992 and a hard winter during 1992 to 1993 resulted in a significant loss of mule deer. Relatively low recruitment levels since then combined with significant mortality during the winter of 2001-2002 in portions of eastern, southeastern, and south-central Idaho resulted in mule deer populations lower than desired by both Department biologists and hunters. The Department plans to intensively manage deer to increase the number of mule deer and increase the proportion of mature bucks.

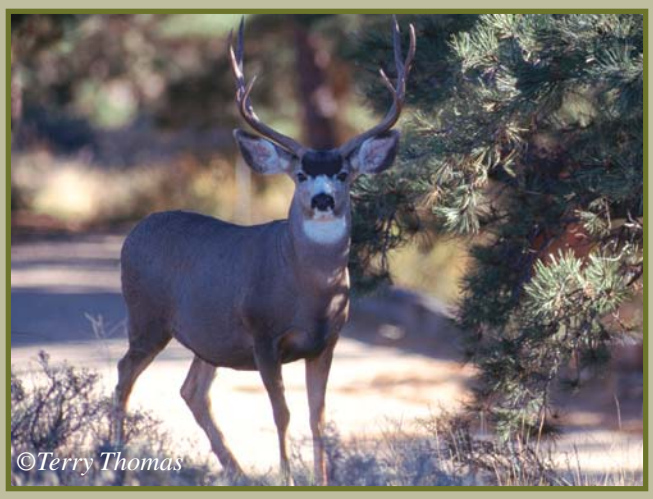
A number of factors may influence mule deer populations and the hunting experience:

1. Habitat changes caused by fire, fire suppression, invasive plants, and excessive livestock grazing have lessened the ability of some habitats to support mule deer populations.
2. Climatic swings such as drought and severe winters play a key role in quality and quantity of habitat and the ability of mule deer young to survive to breeding age.
3. Habitats are fragmented and lost as a result of human population growth and real estate and industry development on mule deer habitat.
4. Interactions with elk can negatively affect mule deer and may increase when habitat is poor or limited.
5. Predators play a shifting role as habitat loss and urban sprawl concentrate mule deer populations on smaller tracts of land near human populations. Additionally, the diversity and abundance of alternate prey species affects predator impacts on mule deer populations. The addition of wolves to some ecosystems may play an increasingly important role in mule deer population dynamics.
6. While hunting seasons that are primarily buck-only can affect age structure and the proportion of mature bucks, they generally have little if any influence on total deer populations or population rates of growth.
7. Hunting seasons designed to reduce the vulnerability of mature bucks (e.g. early October) may negatively affect the hunting experience.
8. Off highway vehicle access has increased hunter efficiency and reduced the amount of habitat where deer can find refuge during hunting season.

Deer managers have no control over weather, climate and human population growth.

However, there is opportunity for deer managers to improve existing habitat, reduce the impact of predators, reduce elk populations in important deer habitats, and implement hunting season and rule changes to improve mule deer populations and hunter experience. Short-term (1-10 years) and long-term (beyond 10 years) actions will be taken to achieve the primary goals of:

1) Increasing recruitment rates
2) Increasing winter survival
3) Providing optimal hunting season frameworks that maximize hunter experiences.



Six major strategies we will be implementing to accomplish these goals will be:

- Habitat improvement
- Population management
- Law enforcement
- Predator management
- Access management
- Public involvement/outreach.

The Idaho Department of Fish & Game is committed to engaging the support of public land management agencies, private landowners, elected officials and sportsmen to implement measurable actions that will positively affect mule deer populations and mule deer hunting.

Mule Deer Initiative
Mule Deer for the Future

Habitat Management

Important mule deer habitat is being lost to development in southern and eastern Idaho. Some lost habitat (i.e. housing developments) is not recoverable. Other habitats altered by resource extraction, erosion, and detrimental fires can be restored. Forage plants essential to healthy mule deer populations have declined. Drought conditions have contributed to poor range conditions in many areas. Mule deer summer range has been degraded in other ways to the point that many mule deer enter winter in poor condition. Some winter ranges lack adequate browse that would enable mule deer to survive average winters. Summer ranges have also degraded from the long-term effects of fire suppression, invasive species, and excessive grazing by livestock causing decreased forage availability, destruction of underbrush plant communities, and alteration of aspen stands.

The following habitat management actions are intended to improve mule deer habitat.

1. Action: Identify, map, and determine the status of all large and small mule deer winter ranges.

Justification: Much effort to date has focused on the large mule deer winter ranges. In some areas, little is known about the small winter ranges that support a few deer every year or a few deer in occasional years. Many small winter ranges are threatened by development. As mule deer numbers increase, peripheral winter ranges will become more important. This action will help prioritize conservation, protection, and restoration efforts on all mule deer winter ranges, large and small. The development of a more complete winter range database will enable the Department to monitor the status and trends of all mule deer winter ranges.

2. Action: Develop a mule deer winter range management plan for each large winter range in the MDI area.

Winter Range Plans will include:

- An assessment of the status and condition of the winter range
- An assessment of current and future threats and necessity for conservation and protection
- Recommended conservation, protection and restoration
- Monitoring and adaptive management plans

Justification: Secure adequate winter range to support mule deer populations.

3. Action: Plant a minimum of 100,000 shrub seedlings annually to benefit mule deer.

Justification: Restore or enhance important food sources for mule deer on winter ranges.

4. Action: Manipulate prioritized CRP fields to improve mule deer habitat.

Objectives:

- Inter-seed forbs and legumes on 2000 acres annually
- Replace existing vegetation with blocks and strips of improved feeding cover on 500 acres annually
- Inter-plant 30,000 shrub seedlings in 200 acres annually
- Plant 100 acres of food plots annually
- Revitalize decadent grass stands with burning, mowing, grazing, or haying on 2000 acres annually

Justification: Manipulating existing vegetation on some CRP fields may benefit mule deer. Manipulations of existing CRP fields will require careful coordination with the landowners, FSA, and NRCS. Landowners with new fields enrolled in CRP will be encouraged to plant modified mixes more beneficial to mule deer.

5. Action: Develop block management plans on select CRP priority areas.

Justification: Lands enrolled in CRP benefit many species of wildlife, especially sharp-tailed grouse. Block management plans would help concentrate habitat improvements while insuring that other wildlife resources are not adversely affected. For example, some CRP field treatments may be harmful to sharp-tailed grouse. These treatments can be scheduled and rotated among existing CRP fields to minimize negative impacts to sharp-tailed grouse.

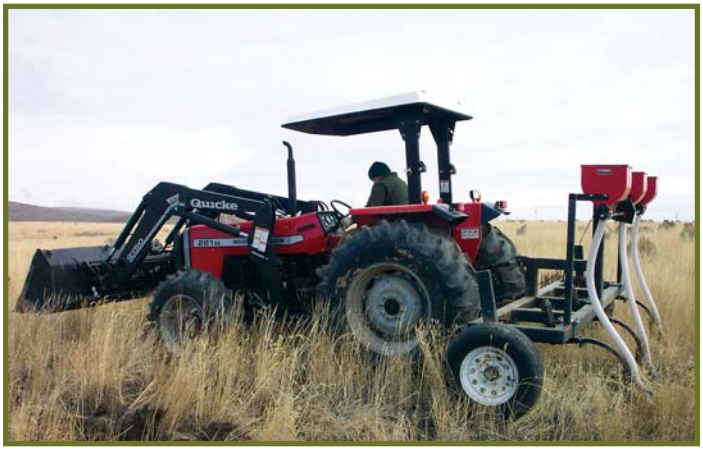
6. Action: Test fertilizer applications on healthy rangeland and CRP in priority mule deer habitats and on sites without noxious or invasive weeds.

Justification: Some range sites may provide improved browse for mule deer with fertilizer applications. This technique may provide faster habitat improvements than planting shrubs in CRP fields.

7. Action: Treat aspen in prioritized areas.

Methods:

- Treat minimum of 150 acres on IDFG WMAs in Southeast and Upper Snake regions.
- Implement projects on FS, BLM, Idaho Department of Lands (IDL) and private lands
- Assess health of aspen communities using established protocols
- Remove encroaching conifers in aspen clones



- Slash old age aspen clones while leaving snags and some live trees
- Fence aspen clones degraded by excessive livestock grazing
- Pursue prescribed fire treatments
- Use root plowing to release clones

Justification: Many aspen communities are important mule deer fawning areas. Aspen clones are used as fawning sites and the understory in healthy aspen provides important feed for mule deer fawns. Aspen clones provide important security habitat for does and fawns. National Forest personnel have reported that Idaho has lost 61% of its aspen since European settlement. Excessive livestock grazing and conifer encroachment threaten many remaining aspen clones. Some areas in eastern Idaho have relatively stable and healthy aspen communities. National Forest and Bureau of Land Management personnel have expressed their intent to increase aspen management. State and federal agencies have requested more specific information on high priority mule deer fawning areas. The Department will support aspen management efforts by land management agencies that benefit mule deer.

Some of the Department's WMAs contain aspen communities that are important to mule deer and could benefit from prescribed treatments. These projects can be initiated and completed in a relatively short time. Similarly, some landowners may be amenable to treating aspen on their properties with Department cost-sharing and support. Aspen treatment projects on other state and federal

lands will take longer to develop and implement. A great deal of collaboration will be required to facilitate aspen treatments on Forest Service, Bureau of Land Management, and Idaho Department of Lands properties.

8. Action: Identify, prioritize, and restore degraded riparian areas.

Methods:

- Beaver management
- Livestock management
- Wildlife management
- Bank stabilization
- Vegetation planting
- Noxious weed management
- Prescribed burning and promoting “let burn” policy on natural start wildland fires

Justification: Riparian areas are important habitat for mule deer and many other species of wildlife.

9. Action: Work with federal land managers and private landowners to facilitate livestock grazing practices compatible with providing good mule deer habitat.

Justification: Some mule deer habitats have suffered from excessive livestock grazing practices. Extensive grazing of lower elevation shrub lands can result in degraded winter range conditions. Extensive use of riparian, mountain shrub, and aspen communities can reduce the quality of important fawn-rearing habitats. Working with federal land managers and private livestock operators, improved livestock grazing practices will be implemented to produce better habitat conditions for mule deer.

10. Recommended Action: Develop an expanded program with adequate funding to conserve key mule deer habitats in perpetuity to benefit today’s communities and future generations.

Conservation Methods:

- Establish a long term program to provide additional and consistent funding to secure key mule deer habitats in perpetuity.
- Pursue conservation agreements as an initial means to secure key parcels.
- Pursue fee title acquisitions only where appropriate and supported by local and elected officials.
- Aggressively work with county Planning and Zoning Commissions to minimize negative developments in mule deer habitat.
- Prioritize conservation efforts with regional mule deer conceptual area plans.
- Increase collaboration with regional land trusts

Justification: Some habitat sites are critical to maintaining mule deer and need to be protected in perpetuity. Currently, the Department does not have an adequate and reliable funding source to secure critical parcels of mule deer habitat. Additionally, these areas are frequently at risk to rapid development. These high priority mule deer areas should be protected with conservation agreements, fee title acquisition, or through county planning and zoning regulations.

Population Management

While habitat is the biggest controlling factor, a number of other factors can affect mule deer populations including hunting seasons and interspecific competition. The Department of Fish and Game can influence these factors to affect population change. How we do that will depend on how each factor affects specific mule deer populations. For example, where hunting has little affect on survival rates, a deer population is unlikely to respond to more conservative hunting seasons. In order to optimally manage mule deer, wildlife managers need an adequate population monitoring program that produces precise results to maximize their ability to detect population changes. An adaptive management framework should be utilized to analyze monitoring information. This will increase management flexibility as various management actions are instituted.

1. Action: Investigate and resolve interspecific competition.

Deer/Elk/Livestock - A broad statement saying increases in elk numbers are responsible for mule deer declines is not entirely accurate. Several important mule deer populations have declined in the absence of elk. Other deer populations have grown in conjunction with growing elk herds. Nevertheless, elk can exclude mule deer from important seasonal ranges. Confounding the issue are habitat changes such as declining shrub lands and increasing forested or grass communities that favor elk.

Vegetation changes caused by excessive grazing, increasing use by elk and perhaps mule deer can alter landscapes and affect habitat use patterns of mule deer. While some grazing practices are detrimental to mule deer, others can be complimentary or even beneficial. The Department will work with willing livestock operators and federal grazing administrators to implement grazing practices that maintain or improve quality mule deer habitat.

Better understand interspecific interactions/ competition through:

- Identifying potential areas of competition (winter ranges, etc.)
- Continue sharing information with other state natural resource agencies on interspecific competition
- Support intensive research
- Develop a better understanding of the differences between deer and elk habitat
- Continue to work with land management agencies and private livestock owners on grazing issues and management
- Continue studying of impacts on habitat caused by elk

Justification: Inter-specific competition can have population level effects, particularly when deer populations are reduced and habitat is degraded due to drought.

2. Action: Collect accurate and timely population information.

Evaluate all mule deer population monitoring methods used throughout the western U.S. Identify and implement state-of-the-art population monitoring techniques that provide accurate and timely information.

Justification: Accurate and timely mule deer population information is critical for establishing appropriate hunting seasons and monitoring the success of MDI.

3. Action: Evaluate a biennial regulation cycle.

Justification: A biennial season setting process would enable managers to better monitor effects of stable hunting season frameworks.

4. Action: Continue to promote and increase interstate coordination.

Justification: All western states are faced with a mule deer population decline. Sharing information across the western states will improve the understanding of mule deer needs. Learning from the success and failures of other states will improve chances of implementing successful projects.

5. Action: Maintain accurate and timely harvest information.

- Continue to ensure at least an 80% response rate for the Mandatory Harvest Report
- Continue surveys to measure nonresponse bias
- Implement changes to the Mandatory Harvest Report system to improve compliance, quality assurance, and timeliness

Justification: Precise and reliable hunter harvest and effort data is an important component for managing mule deer.

6. Action: Identify measures for evaluating success of MDI programs and efforts.

- Success of the Mule Deer Initiative will largely be gauged by hunter satisfaction
- Population and buck composition goals will be established to meet public desires

Justification: It will be critical to the mule deer initiative to establish criteria for success. Hunter satisfaction will be a large component, but additional goals to measure success biologically will be set consistent with public desires and biological abilities.

7. Action: Assess the impacts of mortality on mule deer populations on highways and railroads and seek mitigation for negative impacts

Methods:

- Increase collaboration with the Idaho Department of Transportation (IDOT) and the Union Pacific Railroad (UPR)
- Continue to identify new highway mortality hotspots
- Record highway mortalities to quantify mortality
- Provide IDOT with list of deer mortality hotspots and potential preventative measures
- Encourage IDOT to consider wildlife issues prior to future highway projects

Justification: There are some sites where mule deer vehicular mortality is especially high and little has been done to decrease mortalities. Other potentially high mortality sites have yet to be identified. Some mule deer populations have been significantly impacted by past transportation projects (e.g. I-84). Mitigation efforts for past and future transportation projects will be pursued.

8. Action: Implement emergency winter feeding when necessary

Justification: It is normal for a percentage of mule deer to die during winter. Animals entering winter in poor condition or suffering from disease or injury can be expected to die. Winter conditions vary from year to year and normally don't cause significant concern for over-winter survival of mule deer. However, there are times when unusual weather patterns may create critical periods of stress when winter forage becomes limited, unavailable, or animals are forced into areas involving public safety. During these emergency conditions, the Department will cooperate with regional Winter Feeding Advisory Committees and local sportsmen to implement emergency winter feeding to prevent excessive mortality in adult female deer.

Predator Management

The effect predators have on prey populations depend upon habitat conditions, the numbers of predators and prey, and the sex and age ratios of predator and prey populations. Knowing all of these factors is critical to prescribing appropriate predator management actions. Widespread predator management may or may not increase a mule deer population. Populations near carrying capacity of the habitat will likely not respond to predator management activities.

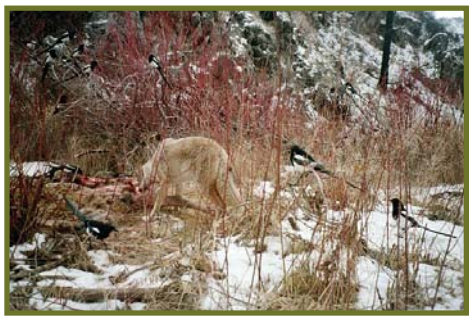
A small mule deer population experiencing one or more severe winters or droughts may be more susceptible to predation until their numbers increase.

Predator management can benefit mule deer populations when:

- Mule deer populations are well below habitat carrying capacity
- Populations of alternate prey species (rodents and rabbits) are at low levels
- Predation can be identified as a limiting factor
- Management efforts reduce predator populations enough to yield results
- Management efforts are timed to be most effective
- Management is focused

1. Action: Identify concentrated mule deer doe fawning areas where populations are below carrying capacity. Annually direct Wildlife Services coyote management activities in areas where populations are below carrying capacity. Coyote management activities should be conducted February through July.

Justification: The first month of a mule deer's life is a critical time for survival. In order to have the greatest effect on fawn survival, coyotes should be removed prior to and during the fawning period in areas meeting the criteria listed above.



2. Action: Develop and implement uniform mountain lion harvest strategies across the MDI area. Reduce mountain lion populations, through liberalized hunting opportunity, in areas where mule deer populations are below objective and mountain lion predation is a limiting factor to population growth.

Justification: When mule deer populations are below carrying capacity, mountain lion predation can have a limiting affect.

Enforcement

Enforcement of regulations will play an important role in achieving MDI goals. Poor compliance with regulations would render them ineffective in enhancing mule deer populations, and would result in decreased hunter satisfaction. Recommended actions include, but are not limited to the following:

1. Action: Improve compliance of the IDFG Motorized Vehicle Rule and USFS Travel Plans. Develop Action Plans that concentrate enforcement effort.

Justification: In order to be effective, compliance with regulations is essential. Management of motorized access for hunting is designed to reduce user conflicts, improve hunting experiences, and reduce vulnerability of mule deer.

2. Action: Cooperate with the USFS, BLM, and IDL to enforce existing travel management plans and regulations restricting OHV use.

Justification: Rules and enforcement regulating OHV use vary widely among federal (USFS, BLM) and state agencies (IDFG, IDL). To maximize efficiency a cooperative enforcement effort by all agencies to educate resource users on OHV restrictions is required.

3. Action: Protect mule deer on winter ranges vulnerable to human harassment, including poaching of mature males. Develop Action Plans that concentrate enforcement effort on mule deer winter ranges.

Justification: Mature mule deer bucks are most vulnerable to poaching when they arrive on winter ranges. Documented cases and numerous reports of poaching indicate that the effectiveness of efforts to increase numbers of mature bucks may be reduced or negated by illegal take.

4. Action: Develop research-based data to better quantify poacher-violation detection and illegal mortality of mature bucks using radio-telemetry monitoring of male mule deer in conjunction with the state-wide deer study. Document deer movements and mortalities, particularly as they relate to mature bucks.

Justification: Attempt to improve data on violation detection of poached mule deer, particularly mature bucks. Assist managers to better estimate population composition. Improve public education of lost resources due to poaching.

5. Action: Increase effectiveness of enforcement actions and compliance with regulations. Inform prosecutors and judges of the role enforcement plays in achieving MDI goals.

Justification: Fines and penalties rarely exceed the minimum amounts set in Idaho Code by the legislature. Public comments support stiffer fines, penalties and revocations for poaching. Educating prosecutors and judges about the resource values that wildlife provides to the citizens of Idaho is important.

Access Management

During the past 10 years, increased use of motorized vehicles by hunters has resulted in more conflicts between hunters and has created difficult challenges for managing mule deer. Hunters are using off road vehicles to reach remote areas where deer used to be secure. This has made deer more vulnerable, reduced numbers of mature bucks, and increased hunter congestion.

The Department is working to maintain liberal general hunting opportunities and provide hunts with more mature bucks and lower hunter densities. Controlling access can help achieve those goals.

In some Game Management Units there are significant amounts of private land that are closed to hunting or that block access to public lands.

The Department will work with land managers, landowners, and sportsmen to manage motorized access during hunting seasons, maintain access to public lands, improve access to public and private lands, increase deer survival, and provide a balance between motorized and non-motorized hunting experiences.

The following actions will be implemented to help address hunter access issues.

1. Action: Develop a coordinated, comprehensive motorized access management plan throughout the MDI area to offer a variety of hunter opportunities, reduce user conflicts, and reduce vulnerability of deer where appropriate.

- Identify areas where the level of motorized access is causing high buck vulnerability, low buck to doe ratios, or significant conflicts among hunters
- Document the effects of road densities on deer vulnerability and habitat use
- Document problem areas and identify strategies for managing motorized use

Justification: Conflict among motorized and non-motorized hunters is a statewide issue with sportsmen. In response, the Commission created the "Motorized Vehicle Rule" (IDAPA 13.01.08.411) in 2003. The Department will identify problem areas and implement solutions in cooperation with the BLM, USFS, and private landowners.

2. Action: Continue involvement with the travel planning efforts on public lands.

- Support the current direction of the USFS to eliminate cross-country motorized travel on national forests
- Comment on future travel plans on BLM managed lands
- Recommend reductions in motorized road/trail densities where appropriate
- Recommend seasonal road/trail closures, if necessary

Justification: Travel planning on national forests or rangelands is very difficult, usually contentious, and rarely occurs. However, appropriate travel management can improve mule deer habitat, increase security, increase mature bucks, maintain hunting opportunities, and provide desirable hunting experiences.

3. Action: Identify areas where access to and through private property would improve deer hunting opportunities, work with landowners to gain opportunities for access through Access Yes, right-of-way agreements, conservation easements, etc.

Justification: Enhance and improve deer hunting experience and reduce hunter densities in some areas by increasing hunter access to currently inaccessible areas.

4. Action: Evaluate impacts to mule deer from human disturbance on seasonal ranges. Recommend mitigation where appropriate.

- Winter range closures
- Fawning habitat disturbances

Justification: Human activities on some winter ranges cause deer to expend energy necessary for survival. Access restrictions may reduce disturbance to deer and improve winter survival rates.

Public Involvement/ Outreach

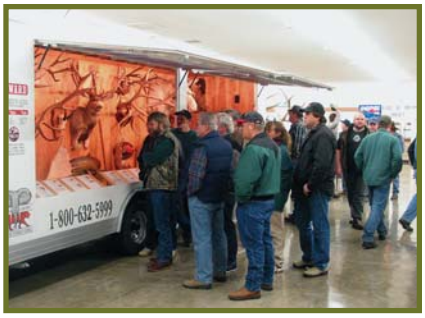
Public involvement and support is a critical component of the Mule Deer Initiative. Communications will play a prominent and continuing role in the success of the initiative.

1. Action: Communicate with hunters and general public on all aspects of MDI on a continuing basis.

Justification: IDFG has a statutory obligation as well as an informal social contract to inform and educate the citizens of Idaho on the status of their wildlife. A thorough awareness of MDI is likely to help build support for the Initiative and attract active assistance on the part of volunteers.

2. Action: Help our constituents understand mule deer management, population dynamics and effects of hunting season options.

Justification: Better public understanding of mule deer hunting season effects on deer populations and hunter opportunity should increase hunter involvement and satisfaction, and provide managers with more options to manage mule deer populations.



3. Action: Enhance public opinion sampling and citizen involvement

Justification: Public meetings do not provide an accurate cross section of IDFG constituents. Through the use of random surveys, wildlife managers can better sample and understand public preferences and opinions and design more satisfying hunting opportunities.

4. Action: Continue public information efforts on predator/prey interactions.

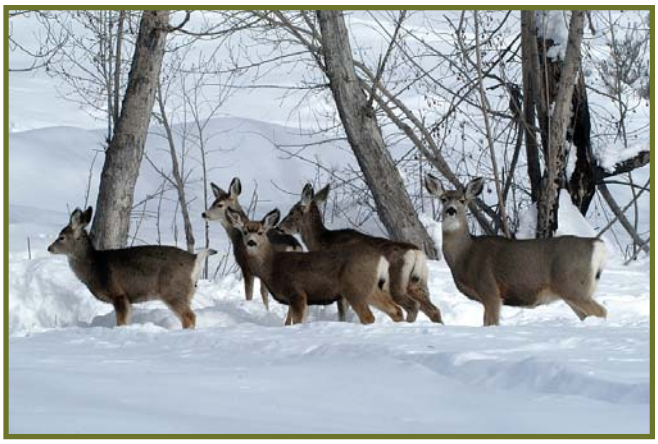
Justification: Understanding the impacts of predators on mule deer population dynamics will lead to better decisions on predator management efforts

Summary

The actions identified in this plan represent an ambitious effort and commitment by the Department to:

1) improve mule deer populations
2) increase hunter satisfaction, and
3) protect and improve mule deer habitat.

Without the support of partners, many of the goals contained in this work plan will not be possible. The Department encourages sportsmen, private landowners, and public land managers to work together to improve the future outlook for mule deer in Idaho.

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